

IN THE CLAIMS

1. (Currently Amended) A method of assigning and allocating network resources to Layer 1 Virtual Private Networks (L1-VPNs), on a communication network, the method comprising the steps of:

collecting information about available resources on the network; ~~and~~

designating a first subset of the resources as dedicated L1-VPN resources, at least a first portion of the first subset of the resources being assigned to a first L1-VPN; and

designating a second subset of the resources as shared L1-VPN resources, at least a second portion of the second subset of the resources being assigned to the first L1-VPN and to a second L1-VPN.

2. (Canceled)

3. (Currently Amended) The method of claim ~~2~~1, wherein the resources assigned to the first L1-VPN ~~subscriber may only be used by~~ are dedicated to the first L1-VPN subscriber.

4. (Canceled)

5. (Currently Amended) The method of claim ~~4~~1, wherein the ~~at least two first~~ first L1-VPN ~~and second L1-VPN subscribers~~ are a first group of L1-VPNs subscribers, and wherein the ~~shared~~ resources assigned to the first group of L1-VPNs subscribers may be used by one of the group members at a time.

6. (Currently Amended) The method of claim 1, further comprising designating a third subset of the resources as public L1-VPN resources.

7. (Original) The method of claim 1, wherein resources not designated as dedicated L1-VPN resources and not designated as shared L1-VPN resources are public L1-VPN resources.

8. (Original) The method of claim 1, further comprising the step of communicating information associated with the steps of designating the first subset of the resources as dedicated

L1-VPN resources; and designating the second subset of the resources as shared L1-VPN resources to network elements to enable those resources to be allocated on the communication network.

9. (Currently Amended) ~~A~~ The method of allocating network resources to L1-VPNs on a communication network, the method claim 1, further comprising the steps of:

~~receiving assignment information associated with assignment of network resources to L1-VPNs; and~~

receiving a request associated with ~~an~~ the first L1-VPN subscriber for network resources; and

allocating ~~assigned~~ network resources from the first portion of the first subset to fulfill the request.

10. (Canceled)

11. (Currently Amended) The method of claim 9, wherein the step of allocating assigned network resources comprises determining current assignment information for the L1-VPN ~~subscriber~~ to determine which network resources have been assigned to the L1-VPN ~~subscriber~~, and ~~preferentially~~ allocating network resources to the L1-VPN ~~subscriber~~ from the first portion of the first subset if those network resources that have not been previously assigned to the L1-VPN subscriber.

12. (Currently Amended) The method of claim 9, further comprising designating a third subset of the resources as public L1-VPN resources, and wherein the step of allocating assigned network resources comprises determining current assignment information for the L1-VPN ~~subscriber~~ to determine which of the second portion of the second subset of the network resources have been assigned to the L1-VPN ~~subscriber~~, and determining which of the assigned network resources are currently in use.

13. (Currently Amended) The method of claim 12, wherein the step of allocating further comprises ~~preferentially~~ selecting network resources from the second portion of the second

subset that have been assigned to the L1-VPN ~~subscriber~~ and which are not currently in use to fulfill the request, and selecting public network resources to augment the assigned resources to fulfill the request if necessary.

14. (Currently Amended) The method of claim 13, wherein the first L1-VPN and second L1-VPN are a first group of L1-VPNs, and wherein the step of allocating comprises prioritizing between L1-VPNs ~~subscribers~~ to enable the a-first L1-VPN subscriber associated with assigned network resources to obtain L1-VPN resources associated with the second portion of the second subset that are currently in assigned to a third L1-VPN that is not part of the first group of L1-VPNs preempt a second L1-VPN subscriber currently allocated the assigned network resource.

15. (Currently Amended) The method of claim 14, wherein prioritizing results in a transfer of the network resource from the ~~second~~ third L1-VPN ~~subscriber~~ to the first L1-VPN ~~subscriber~~.

16. (Canceled)

17. (Original) The method of claim 9, wherein the step of allocating is done on demand.

18. (Original) The method of claim 9, wherein the step of allocating allows network resources to be shared between multiple L1-VPN subscribers by allowing the same network resources to be allocated to more than one L1-VPN subscriber, one L1-VPN subscriber at a time.

19. (Currently Amended) An apparatus for assigning and allocating network resources to Layer 1 Virtual Private Networks, L1-VPNs, on a communication network, comprising:

a processor containing control logic configured to:

~~assign network resources to L1-VPN subscribers; and~~

~~allocate assigned resources in response to requests~~

collect information about available resources on the network; and

designate a first subset of the resources as dedicated L1-VPN resources, at least a first portion of the first subset of the resources being assigned to a first L1-VPN; and

designate a second subset of the resources as shared L1-VPN resources, at least a second portion of the second subset of the resources being assigned to the first L1-VPN and to a second L1-VPN;

receive a request associated with the first L1-VPN for network resources; and
allocate network resources from the first portion of the first subset to fulfill the request.

20. (Currently Amended) The apparatus of claim 19, wherein the resources are optical network resources, and wherein allocated assigned resources ~~may be used by~~ are dedicated to only one L1-VPN subscriber while allocated.